Amendments to the Claims

This listing of claims will replace all prior versions and listings of all claims in the application.

Claims 1-23 **(Cancelled)**

24. **(Currently Amended)** A method of analyzing a plurality of biochips comprising

a) inserting a first biochip into a first station of an analysis device;

b) inserting a second biochip into a second station of the analysis device,

wherein each of said first and second biochips comprise a substrate comprising:

an array of detection electrodes, each ~~comprising a plurality of test sites, each test site~~ comprising:

i) a different capture binding ligand;

ii) a different target analyte; and

iii) a label; and;

a plurality of electrical contacts;

c) detecting the presence of said labels on said first biochip; and

d) detecting the presence of said labels on said second biochip.

25. **(Previously presented)** A method according to claim 24, further comprising moving a detector between said first station and said second station.

26. **(Previously presented)** A method according to claim 24, further comprising moving the first station to a detector and moving the second station to a detector.

27. **(Previously presented)** A method according to claim 24, wherein the act of detecting the presence of said label on said first biochip comprises utilizing a first detector associated with said first station, and wherein the act of detecting the presence of said label on said second biochip comprises utilizing a second detector associated with said second station.

28. **(Cancelled)**

29. **(Previously presented)** A method according to claim 27, wherein at least one of said first and second detectors comprises an electronic detector.

30. **(Currently amended)** A method according to claim 24, wherein said capture binding ligands are nucleic acid capture probes, said target analytes are target nucleic acid sequences, and said ~~assay complexes are~~ nucleic acid capture probes hybridize to said target nucleic acid sequences to form hybridization complexes.

31. **(Previously presented)** A method according to claim 30, wherein said hybridization complexes comprise said capture probes hybridized to said target sequences, respectively.

32. **(Previously presented)** A method according to claim 30, wherein said labels are covalently attached to said target sequences.

33. **(Previously presented)** A method according to claim 24 or 30, wherein said labels are hybridization indicators.

34. **(Previously presented)** A method according to claim 33, wherein said hybridization indicators are intercalators.

35. **(Previously presented)** A method according to claim 30, wherein said target sequences each comprise a first domain and a second domain, said hybridization complexes each comprise:

a) said capture probes hybridized to said first domains of said target sequences; and

b) label probes hybridized to said second domains of said target sequences.

36. **(Currently amended)** A method according to claim 35 wherein said label probes each comprise ~~at least one~~ three or more covalently attached labels.

37. **(Cancelled)**

38. **(Previously presented)** A method according to claim 24, 30 or 36 wherein said labels are electron transfer moieties (ETMs).

39. **(Previously presented)** A method according to claim 38 wherein said ETMs are transition metal complexes.

40. **(Previously presented)** A method according to claim 39 wherein said transition metal complexes are metallocenes.

41. **(Previously presented)** A method according to claim 24, further comprising:

a) receiving detection information from said first biochip at a processor; and

b) receiving detection information from said second biochip at the processor.

42. **(Previously presented)** A method according to claim 41, wherein the act of detecting the presence of said label on said first and second biochips comprises analyzing said received detection information.